



A.D. 1818 N^o 4316.

S P E C I F I C A T I O N

OF

JEREMIAH SPENCER,

FIRE GRATES.

L O N D O N :

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A.D. 1818 N° 4316.

Fire Grates.

SPENCER'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JEREMIAH SPENCER, of Great James Street, Bedford Row, in the County of Middlesex, Gentleman, one of the People called Quakers, send greeting.

WHEREAS His most Excellent Majesty King George the Third, did, by
5 His Letters Patent, under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Fifth day of December, in the fifty-ninth year of His reign, give and grant unto me, the said Jeremiah Spencer, my eñors, adñors, and assigns, His especial licence, full power, sole privilege and authority, that I, the said Jeremiah Spencer, my eñors, adñors,
10 and assigns, during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick upon Tweed, my Invention of "AN IMPROVEMENT ON CERTAIN DESCRIPTIONS OF FIRE GRATES, BY WHICH IMPROVEMENT THE COMBUSTION OF SMOKE IS MORE EASILY EFFECTED;" in which said Letters Patent there is contained a
15 proviso that if I, the said Jeremiah Spencer, shall not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery within two calendar months next and immediately after the date of the said Letters
20 Patent, that then the said Letters Patent, and all liberties and advantages

Spencer's Improvements in Certain Descriptions of Fire Grates, &c.

whatsoever thereby granted, shall utterly cease, determine, and become void, as in and by the same, relation being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Jeremiah Spencer, do hereby declare that the nature of my said Invention, 5 and the manner in which the same is to be performed, are particularly described and ascertained by the Drawings hereunto annexed, and the following description thereof, (that is to say) :—

My improvement on certain descriptions of fire grates, by which the combustion of smoke is more easily effected than by the common grates, (in which 10 the fresh fuel is kept always at the top), consists of and is effected by substituting an invertable grate, hung loose and turning upon an axis, whereby the coals or other fuel, when put on the top above that which is burning, may be inverted and brought undermost by the inversion of the grate, and the fire made to kindle downwards, so that the smoke may pass, as it ascends, through 15 the fire, and may be consumed.

Fig. 1 represents a revolving grate A, A, A, hung upon a pivot or pin fixed into the chimney back B, upon which pivot or pin it is intended to turn vertically, so that the top of the grate C, which, by its being turned, will occasionally become the bottom, must have a similar grated covering 20 with the bottom, and both be made to open, as each will be required to do when uppermost, the grated lid resting when open against the back of the chimney.

Fig. 2 is another contrivance to invert the fuel, which may be performed by a grated box in the form of an oblong square, having all the four sides like 25 the front of an ordinary grate, which box is hung or suspended horizontally between two upright supporters A, A, by two pins, each pin going from the centre of each end of the grate or fire-box into the uprights, the pins resembling the poles of an imaginary axis passing horizontally through the centre of the grate B, B. The bars are to be sufficiently close to prevent 30 the fuel from falling out when the grate is turned, or if placed much asunder, spikes from them projecting upwards and downwards may be added; all the four sides may be made to open, each opening towards and lying against the back of the chimney when uppermost, as represented in both Figures, and intended to be fastened, when shut down, by an eye or loop D and bottom E. The grate 35 or box may be turned by a handle or lever fitted or attached to the ends of the pins or poles projecting beyond and through the upright, as seen at F, and the grate held or confined in the position required by a pin put through the upright into a corresponding hole in the revolving grate or

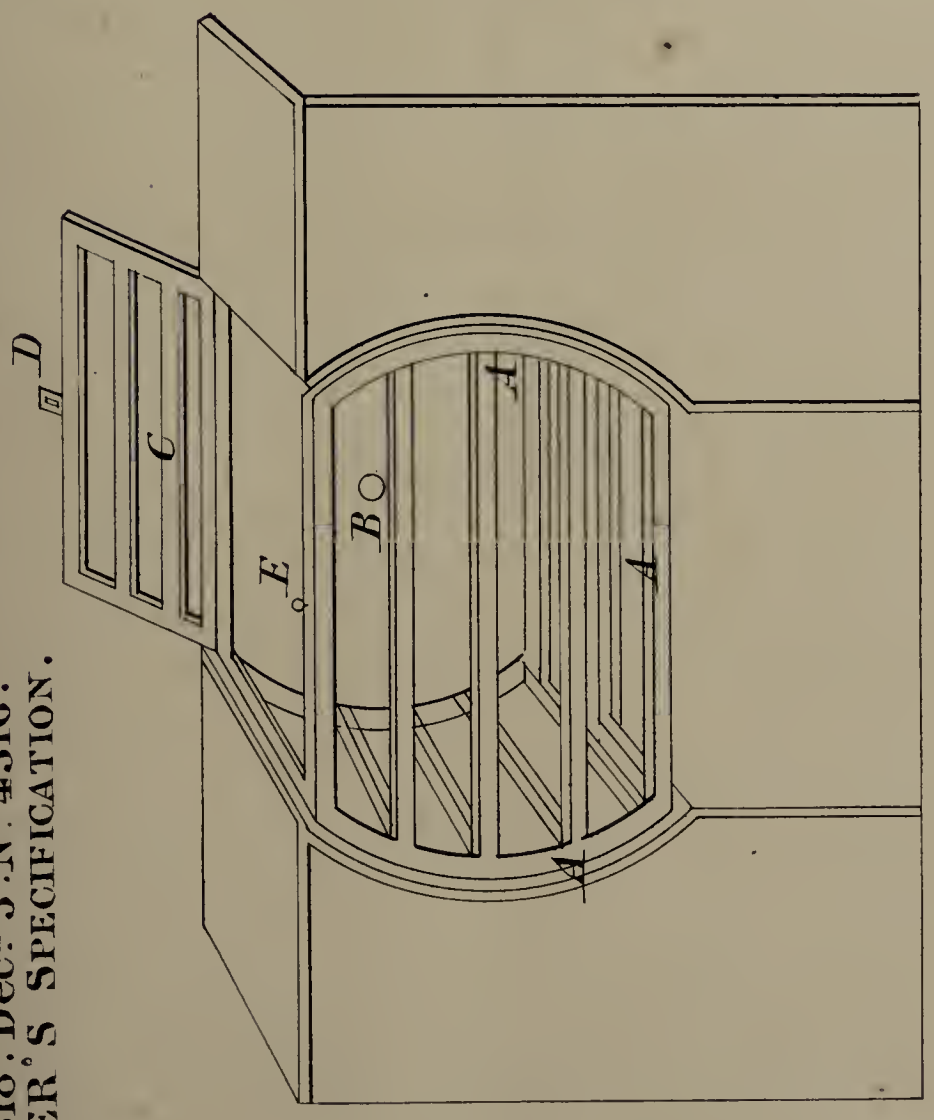


FIG. 1

The enrolled drawing is colored.



FIG. 2

Malby & Sons, Litho

Spencer's Improvements in Certain Descriptions of Fire Grates, &c.

box, as seen by G, Fig. 2, or by a click or any other ordinary means of stopping its revolution.

The principle of my Invention and the exclusive right which I claim in this Patent is to make fire grates which will revolve so as to invert the fuel, and
5 hence burn downwards.

In witness whereof, I, the said Jeremiah Spencer, hereto have set my hand and seal, this Fourth day of February, in the year of our Lord One thousand eight hundred and nineteen.

JEREMIAH (L.S.) SPENCER.

10 **AND BE IT REMEMBERED**, that on the Fourth day of February, in the year of our Lord 1819, the aforesaid Jeremiah Spencer, came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the
15 tenor of the Statute made for that purpose.

Inrolled the Fourth day of February, in the year of our Lord One thousand eight hundred and nineteen.

ALEXANDER.

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